

# Claims

[c1] What is claimed is:

1. A fuel/air delivery system for an internal combustion engine comprising: an intake system through which charge air is delivered to a Venturi; fuel is injected into the throat of the Venturi by means of a pressurized fuel injector; the pressure at the point of injection is reduced from the intake manifold due to the Bernoulli effect; fuel vaporization is facilitated by the reduced pressure at the throat of the Venturi; air and fuel are well mixed because of the turbulence in the throat and discharge of the Venturi; and most of the pressure lost in the throat of the Venturi is recovered at the discharge of the Venturi.

[c2] 2. The performance and efficiency of the engine is improved by the introduction of fuel by means of a fuel injector located at the throat of the venturi.

[c3] 3. The Venturi induction performance is complemented by a compressed air intake manifold from a supercharger or turbocharger compressor.

[c4] 4. The action of the Venturi is improved over the air flow range by incorporating the throttle into the Venturi de-

sign, providing a variable throat area in the Venturi.

- [c5] 5. Fuel heated from the exhaust manifold and subsequently injected into the Venturi will improve the thermal and combustion efficiency of the engine.